

Remarks

Claims 18-41 are in the application. All original claims have been cancelled. Claims 18, 28, and 36 are in independent form. Reconsideration is requested.

As requested by the Examiner, applicants submit an information disclosure statement listing prior patents cited in the application.

The specification is objected to because the abstract is improper and the phrase "no such figure" is included at page 11. The abstract has been rewritten. Applicants were unable to locate the cited phrase on page 11 of the application. Applicants request, therefore, that this objection be withdrawn.

The specification is objected to because page 22, line 17, refers to "Figure 3," rather than "Figure A3." The specification has been amended to correct the typographical error. Applicants request, therefore, that this objection be withdrawn.

The paragraph beginning at page 4, line 17 has been amended to correct a typographical error referencing a prior patent.

Original claims 8-17 are objected to for informalities and rejected under 35 USC 112, second paragraph, for indefiniteness. Claims 8-17 have been cancelled.

Claims 8-15 stand under 35 USC 102(b) for anticipation by Delorme (US Pat. No. 5,948,040). Claims 16 and 17 stand under 35 USC 103(a) for obviousness over Delorme in combination with other references; Curtright (US Pat. No. 6,314,370), Davis (US Pat. No. 6,353,794), and Dwyer (US Pat. No. 6,922,631). Claims 8-17 have been cancelled and replaced by new claims 18-39. Applicants respond as follows.

Delorme is directed to a consumer-level travel reservation and routing system.

An advantage of the invention is that travel planning can be optimized in an iterative process which incorporates reserving,

purchasing, and ticketing the planned travel quickly and personally. The user constructs a travel route and at the same time constructs a customized travel log for previewing the initial travel route. On the basis of the multimedia preview of the initial travel route, the trip planner undertakes revision of the travel route, e.g. by changes in the selected transportation routes, waypoints, and selected POIs. The travel route is recalculated by the TRIPS software through reservation system links and the user-customized travel log is also reconstructed for further preview. Further refinements can follow in subsequent iterations until a satisfactory travel route is achieved and a ticket purchase is made through ticketing system links. All accounting and transaction information is tracked by the TRIPS software and a hard-copy ticket and map are then immediately printed for the user. (Col. 7, lines 36-52.)

Delorme does teach or suggest a flight-planning system by which a pilot generates a flight plan, as recited in independent claims 18, 28, and 36. Delorme provides no teaching or suggestion of using "flight navigation charts."

Moreover, Delorme provides no teaching or suggestion of utilizing server-based flight navigation charts as recited in independent claims 18, 28, and 36.

For example, new claim 18 recites:

accessing over a computer network from a client computer a selected composite flight navigation chart from among plural selected composite flight navigation charts stored at a server computer, each selected composite flight navigation chart including a flight chart merged with flight navigation waypoints.

Claim 28 recites that composite navigation charts are provided over a network to a browser:

software for providing the selected composite flight navigation chart over a computer network to a browser on a client computer, and also providing a vector drawing extension for the browser, the vector drawing extension functioning to incorporate flight plan routing into the selected composite flight navigation chart to form a flight plan.

And claim 36 recites analogous subject matter. As described in the application, providing charts from a server provides "an efficient and convenient method for updating navigation, airspace, road data aircraft performance and weight and balance data. (Application page 9, lines 41-45.)

In contrast, Delorme would lead one skilled in the art away from use of charts provided over a computer network by teaching that map information for the consumer is provided in a static CD-ROM format:

For more comprehensive travel planning, the preferred TRIPS embodiment shown in FIG. 1A provides information, functions and interactive sessions by a combination of online or distributed software working in concert with locally installed TRIPS software data and capabilities. For example, basic enduring mapping functions and data can be provided on CD-ROM at 117, which reduces delays involved in online transmission of masses of graphic mapping data. Along with these mapping capabilities, the CD-ROM product, typically purchased by phone order or in a retail store, also includes a subscription offer, user instructions and automatic set-up program, inviting and facilitating easy connection and interaction with authorized, compatible online TRIPS services. The CD-ROM product offers attractive maps and functionality as a stand-alone product--readily enhanced with updated and "real-time" travel information and services via distributed computer communications. (Delorme, col. 14, lines 1-18.)

Applicant submits that utilizing server-based flight navigation charts provides the most current navigation information possible, which is critical to providing safe and accurate flight planning. The simple consumer-based trip planning of Delorme has no need for such timeliness and accuracy in the map information and so can utilize CD-ROM maps, which are typically out-dated.

Furthermore, Delorme provides no teaching or suggestion of using composite maps that include multiple charts that are merged together. For example, claim 18 recites:

a selected composite flight navigation chart from among plural selected composite flight navigation charts stored at a server computer, each selected composite flight navigation chart including a flight chart merged with flight navigation waypoints,

and claim 28 recites:

software for merging flight navigation waypoints with a selected flight chart from among plural flight charts stored at a server computer to form a selected composite flight navigation chart.

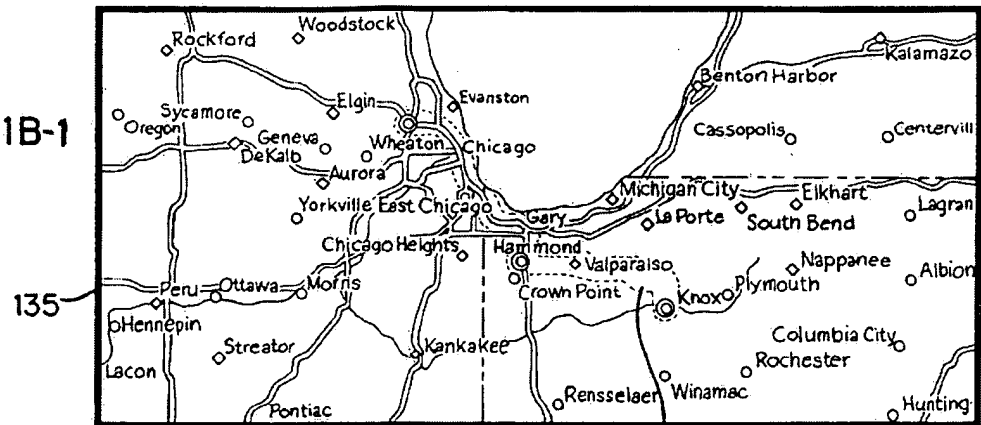
Claim 36 recites subject matter analogous to that of claim 28. This aspect of the claims is described in the application beginning at page 23, line 40:

These three frames are contained in one parent frame (35), this allows the scrolling of the Background chart image and route to remain synchronized while only one frame is visible to the Client user, the other two frames provide important functions. In the preferred embodiment, the background frame (36) contains the viewable chart (e.g. the frame is visible). The foreground frame (37) is transparent except for the route line (38) and or waypoints features to be overlaid on the chart background frame (36).

As illustrated in Fig. 1B (reproduced below), Delorme does not teach or suggest merged navigation charts. Instead, Delorme describes a display format in which different types of information are rendered as separate and distinct window:

FIG. 1B pictures a single "frame" or "page" of a larger set of TRIPS output. Typical TRIPS travel plans often include related multiple screens, digital frames and/or pages or sheets of paper, for longer, more complicated, itineraries and/or to show more detail at the user's option. TRIPS travel plans can also be shorter and simpler than the FIG. 1B example. (Delorme, col. 18, lines 32-39.)

FIG 1B-1



DIRECTIONS

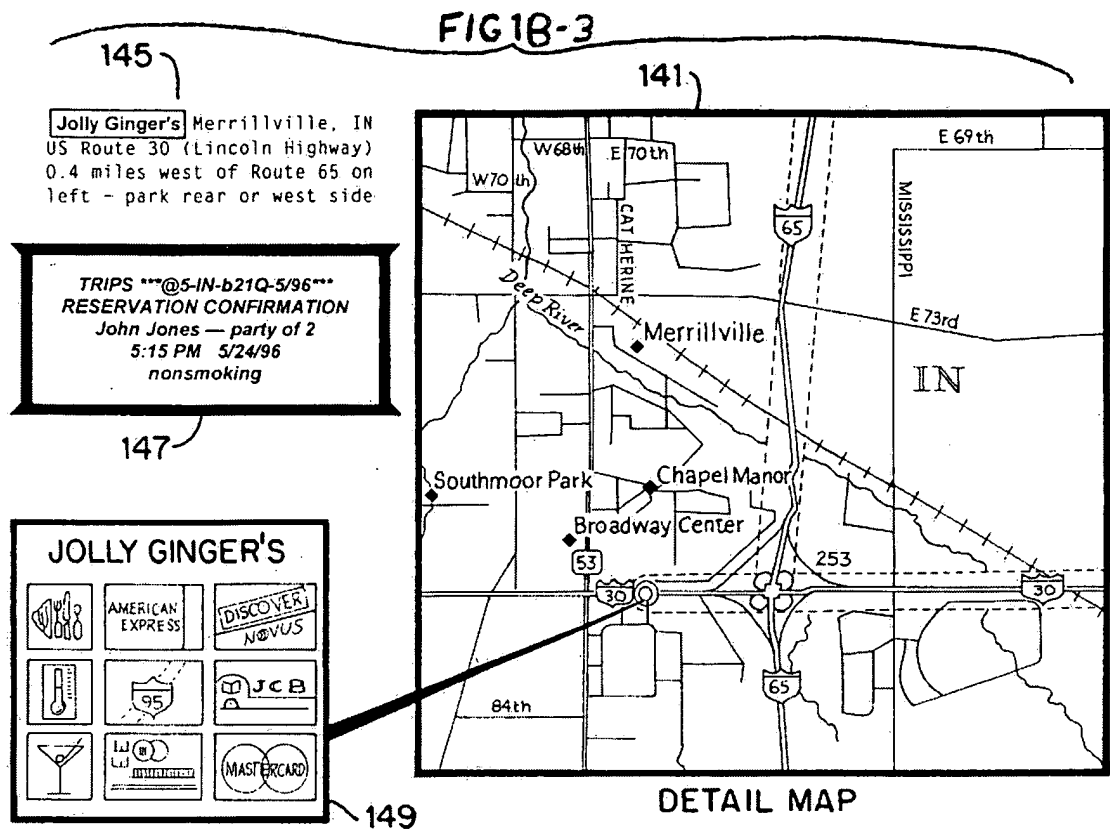
137

FIG 1B-2

139

| | Road | Dir | Near | Exit # | Time | Dist | Mi |
|---|--|-----|------------------|--------|------|------|-----|
| | START - Knox, IN | | | | | | |
| 1 | US 35 (SR 8, CR 400 E, Heat | N | Knox, IN | | 0:00 | 0.0 | 0.2 |
| 2 | US 35 (SR 8, CR 400 E) | N | Knox, IN | | 0:00 | 0.1 | 6 |
| 3 | US 30 | W | | | 0:08 | 6.4 | 38 |
| | STOP - Jolly Ginger's, IN | | | | | | |
| 4 | US 30 (Lincoln Hwy) | E | Merrillville, IN | | 0:59 | 44.5 | 0.4 |
| 5 | I-65 | N | Merrillville, IN | 253 | 1:00 | 44.9 | 9 |
| 6 | I-90 (East-West Toll Rd) | NW | | 17 261 | 1:09 | 54.1 | 45 |
| 7 | I-190 | W | | 78 | 2:00 | 99.6 | 3 |
| | FINISH - Chicago O'Hare Intl (ORD), IL | | | | | | |

TOTAL DISTANCE: 103 MI, TOTAL TIME: 2:03



Accordingly, applicants submit that new independent claims 18, 28, and 36, and their dependent claims, are patentably distinct from Delorme. Moreover, applicants submit that the independent claims are patentably distinct from Delorme in combination with the other cited references.

Davis is directed to an air travel information and computer data compilation, retrieval and display method and system that allows vendors of an airline to track the progress of client aircraft through their flights. Davis provides no flight planning functionality, at all. Dwyer is directed to a navigational system includes a display device and logic that simultaneously presents a textual display of an original flight plan and a modified flight plan on the display device, as illustrated below.

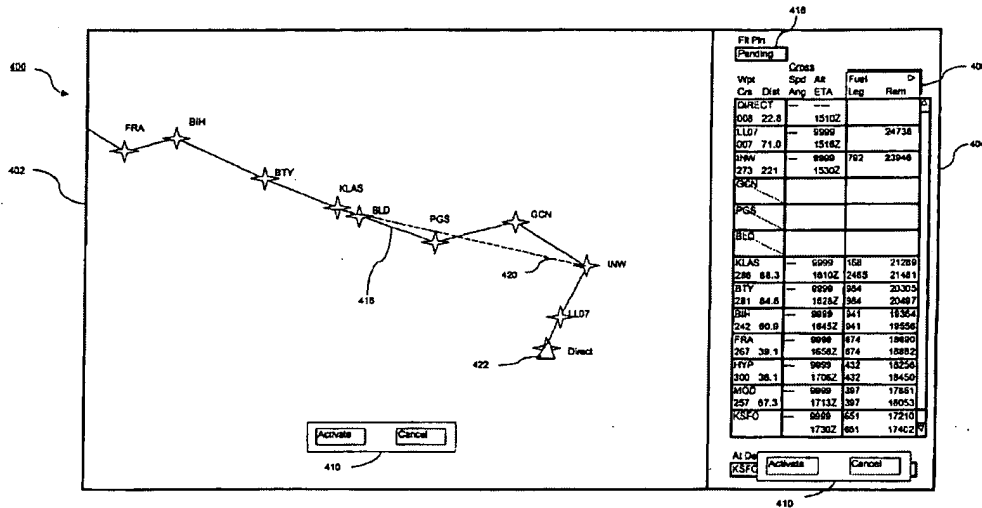


Figure 7

This display of original and modified flight plans occurs in-flight and so inherently does not utilize a network connection, as recited in the independent claims.

Finally, Curtright is directed to a "portable navigation system capable of displaying map information stored in a unique format, and capable of storing and displaying relatively unchanging information." Curtright is like Delorme in that the "data storage device used to hold the map image data 28 is presently preferred to be a CD-ROM, DVD, or the like, but any other data storage system may be employed." (Curtright, col. 4, lines 1-3.)

None of the cited references, alone or in combination, teaches or suggests the flight planning processes or software recited in the claims. Applicants submit, therefore, that new independent claims 18, 28, and 36, and their dependent claims, are patentably distinct from all the cited art.

Applicants submit that the following dependent claims are patentably distinct for additional reasons. Claim 19 recites the step of associating the flight route with navigation waypoints in the selected composite flight navigation chart at the server computer. The cited references provide no teaching or suggesting of providing such an association at a server computer. Instead, the cited references, such as Delorme, are directed to loading maps and software from a CD-ROM and running all trip planning at a client computer. Applicant submits

that providing such associations at a server computer provides the most current navigation information possible, which are critical to providing safe and accurate flight planning.

Claims 20 and 21 specifically recite frame arrangements that overlay particular navigation charts. Delorme and the other cited references do not teach or suggest such a frame structure as a manner of facilitating the interaction between client and server computers.

Claims 22 and 23 recite displaying on the client computer less than all of the selected composite flight navigation chart that is downloaded from the server computer and scrolling across the selected composite flight navigation chart at the client computer without downloading from the server computer. Delorme and the other cited references do not teach or suggest such client-server interactions in a mapping or navigation system. As described in the application, this feature provides scrolling that is not subject to network delays despite the client-server architecture of the system.


Claims 24 and 25 are directed to an internet-based implementation in which the flight planning and mapping are provided within a network browser. In contrast, the cited references, such as Delorme, are directed to stand-alone software that is loaded from a CD-ROM or fixed in an aircraft or portable device.

Claim 26 is directed to a tile structure for the composite flight navigation chart, the tile structure providing facilitating convenient downloading of charts from the server to the client. The cited references

Applicants believe the application is in condition for allowance and respectfully request the same.

IPSOLON LLP
111 SW COLUMBIA #710
PORTLAND, OREGON 97201
TEL. (503) 249-7066
FAX (503) 249-7068

Respectfully Submitted,


Mark M. Meininger
Registration No. 32,428